

1 1. A method comprising:

2 receiving, from an agent, a request to read data from a  
3 read address in pre-fetchable data storage;

4 retrieving an initial amount of data determined by a  
5 pre-fetch factor;

6 determining if the requesting agent received as much data  
7 as it requested; and

8 based upon the determining, storing a next read address.

1 2. The method of claim 1 further comprising, before the  
2 retrieving step, comparing the read address to a stored next  
3 read address, and if they match, retrieving an amount of data  
4 determined by both the pre-fetch factor and a re-read pre-fetch  
5 factor.

1 3. The method of claim 2 further comprising changing the re-  
2 read pre-fetch factor based upon the determining.

1 5. The method of claim 4 further comprising the step of  
2 changing the re-read pre-fetch factor after an interval.

1 6. The method of claim 1 wherein the value of the pre-fetch  
2 factor is alterable.

1 7. The method of claim 5 wherein the incrementing is  
2 selectively enabled and disabled.

1 8. A system comprising:

2 a computer having at least one agent, at least one  
3 bridge, a pre-fetch factor register, a re-read pre-fetch  
4 factor register and a next read address register;  
5 the bridge being configured to  
6 (a) receive from an agent a request to read data from a  
7 read address in pre-fetchable data storage;  
8 (b) request an amount of data determined by a number  
9 stored in the pre-fetch factor register;  
10 (c) determine if the requesting agent has received the  
11 full amount of requested data;  
12 (d) based upon the determination, increment the re-read  
13 pre-fetch factor register.

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1        13. The method of claim 8 wherein the contents of the pre-  
2        fetch factor register is alterable.

1        14. The method of claim 8 wherein the bridge is further  
2        configured so as to be able to enable and disable the  
3        application of the pre-fetch register and the re-read pre-fetch  
4        register under control of the computer.

1        15. The system of claim 8 wherein the pre-fetch register is  
2        contained within the bridge.

1        16. The system of claim 8 wherein the re-read pre-fetch  
2        register is contained within the bridge.

1        17. A computer program product, disposed on a computer  
2        readable medium, comprising instructions to cause a computer to  
3        receive from an agent a request to read data from a read  
4        address in pre-fetchable data storage;  
5        request an amount of data determined by a number stored in a  
6        pre-fetch factor register;  
7        determine if the requesting agent has received the full  
8        amount of requested data;  
9        based upon the determination, store a next read address.

1        18. The computer program product of claim 17 further  
2        comprising instructions to cause the computer to compare the  
3        read address to the stored next read address, and if they match,  
4        determine the amount of data requested also by the value in the  
5        re-read pre-fetch factor register.

1 19. The computer program product of claim 17 further  
2 comprising instructions causing the computer to increment the  
3 re-read pre-fetch factor register based upon the determining.

1 20. The computer program product of claim 17 further  
2 comprising instructions causing the computer to decrement the  
3 pre-fetch factor register after an interval.

1 21. The computer program product of claim 17 wherein the pre-  
2 fetch factor register, the re-read pre-fetch register and the  
3 next read address are contained within a bridge.

1 22. The computer program product of claim 17 wherein the  
2 instructions are stored in and implemented by a bridge.

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